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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,888	02/27/2004	Holger Schanz	4589/CIP	4569
21553	7590	10/20/2005	EXAMINER	
FASSE PATENT ATTORNEYS, P.A.			RATCLIFFE, LUKE D	
P.O. BOX 726			ART UNIT	
HAMPDEN, ME 04444-0726			PAPER NUMBER	

3662

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/788,888	Applicant(s) SCHANZ ET AL.	
	Examiner Luke D. Ratcliffe	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1-6, 8, 10, 12, 17, 19, and 22-24** are rejected under 35

U.S.C. 102(b) as being clearly anticipated by Winterer (4668859).

Referring to **claims 1 and 23**, Winterer shows an emitting arrangement with a radiation source (figure 1), a receiving arrangement with a photodetector (figure 1), a drive axle that is rotatably supported (figure 1), and both prisms are both respectively rigidly connected in common to said drive axle (figure 1).

Referring to **claim 2**, Winterer shows a drive axle that includes two axle arms, with the first prism mounted on the first arm and the second prism mounted on the second arm (figure 1).

Referring to **claim 3**, Winterer shows a drive axle that has a first and a second terminal edge (figure 1).

Referring to **claim 4**, Winterer shows a motor body with the drive axle forms a rotor axle cooperating with and protruding from said motor body (figure 1).

Art Unit: 3662

Referring to **claims 5 and 14**, Winterer shows a first and second axle arms respectively protrude in opposite directions from opposite sides of said motor body (figure 1).

Referring to **claim 6**, Winterer shows a drive axle that forms a rotor axle cooperating with and protruding from said motor body (figure 1).

Referring to **claim 8**, Winterer shows a drive axle that established a direct-drive connection (figure 1).

Referring to **claim 10**, Winterer shows a motor body with an internal stator and an external rotor (figure 1).

Referring to **claim 12**, Winterer shows said prisms fixedly secured to said rotor which forms a mounting plate (figure 1).

Referring to **claim 17**, Winterer shows a first and second prism that are respectively transparent to the light beam and reflection beam (figure 1).

Referring to **claim 19**, Winterer shows an emitting arrangement that includes a radiation source (figure 1), a receiving arrangement that includes a photodetector (figure 1), and the radiation source positioned relative to the first prism and the photodetector positioned relative to the second prism (figure 1).

Referring to **claim 20**, Winterer shows the radiation source positioned relative to the first prism and the photodetector positioned relative to the second prism (figure 1).

Referring to **claim 22**, Winterer does shows the distance radar system mounted on a motor vehicle (figure 1).

Claim Rejections - 35 USC § 103

Art Unit: 3662

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **7 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Winterer (4668859).

Referring to **claim 7**, Winterer shows an axle that appears to be in one piece but is not inherent; it would however be obvious to have an axle that is one piece because this allows both prisms to spin at the same rate and be aligned perfectly the entire time.

Referring to **claim 9**, Winterer shows a motor that is an electronically commutated motor (column 3 lines 28-33). It would be obvious to use a multi-phase d.c. motor because this is a common choice of motor for this application.

Claims **11 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Winterer (4668859) in view of Clark (5309212).

Referring to **claim 11**, Clark shows an external rotor that includes an outer rotor rim provided with position indicator indicia that indicate a rotational position of said rotor (figure 2). It would have been obvious to modify Winterer to include the rotational position indicator taught by Clark because this allows the user to know where the prisms are at all time.

Referring to **claim 21**, Clark shows a radiation source that comprises a laser diode (column 10 lines 55-65). It would have been obvious to modify

Art Unit: 3662

Winterer to include the laser diode taught by Clark because this is a common means for producing light.

Claim **13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Winterer (4668859) in view of Anfinen (6582230).

Anfinen shows a positioning pin that protrudes from a rotor into a positioning hole (column 6 lines 8-17). It would have been obvious to modify Winterer to include the positioning pin taught by Anfinen because this would fix the position of the prisms on the rotor.

Claim **14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Winterer (4668859) in view of Clayton (2857816).

Clayton shows a mounting plate that is rigidly connected to said drive axle (column 9 lines 35-75). It would have been obvious to modify Winterer to include the mounting plate taught by Clayton because this allows for an easy surface to mount the prism to.

Claim **15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Winterer (4668859) in view of Webb (4907879).

Webb shows a fixed non-rotatable stator (figure 1), a rotor rigidly connected to a shaft (figure 1), a motor bracket which fixedly carries said stator and by which said motor can be fixedly mounted (figure 1 Ref 34), and a bearing arrangement (figure 1 Ref 11). It would have been obvious to include the motor mount and bearing arrangements because these pieces allow the surveying system to be attached to a permanent carrying piece.

Art Unit: 3662

Claim **16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Winterer (4668859) in view of Plunkett (4023083).

Plunkett shows a stator that comprises a motor coil with a three-phase winding (column 18 and 19). It would have been obvious to modify Winterer to use the motor coil with the three-phase winding taught by Plunkett because these are common features of electric motors.

Claim **18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Winterer (4668859) in view of Wetteborn (6088085).

Wetteborn shows an emitting arrangement that include a first lens and a receiving arrangement that include a second lens (figure 1). It would have been obvious to modify Winterer to include the first and second lens as taught by Wetteborn because this focuses more of the light on its proper destination.

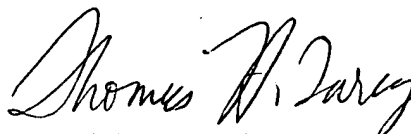
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LDR

A handwritten signature in black ink, appearing to read "Thomas H. Tarcza".

THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600